

**ANOSIOSTES PAULIANI NEW SPECIES AND FIRST RECORD  
OF THE GENUS FROM MEXICO (COLEOPTERA:  
SCARABAEIDAE: CERATOCANTHINAE)**

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**Abstract.**—A new Mexican species of *Anopsiostes* Paulian is described and illustrated; this monotypical genus was previously known only from Ecuador. The distinctive characters of both species and the Antillean genus *Nesopalla* Paulian and Howden are commented.

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American ceratocanthines are represented by 140 species and 15 genera, there are 111 species and 14 genera in South America, and only three species and two genera in North America (Howden and Gill, 1988a, 1988b; Paulian, 1982). Mexican and Central American taxa have not yet been revised and currently there are 26 species and four genera recorded for these countries (Bates, 1887; Blackwelder, 1944; Paulian, 1982).

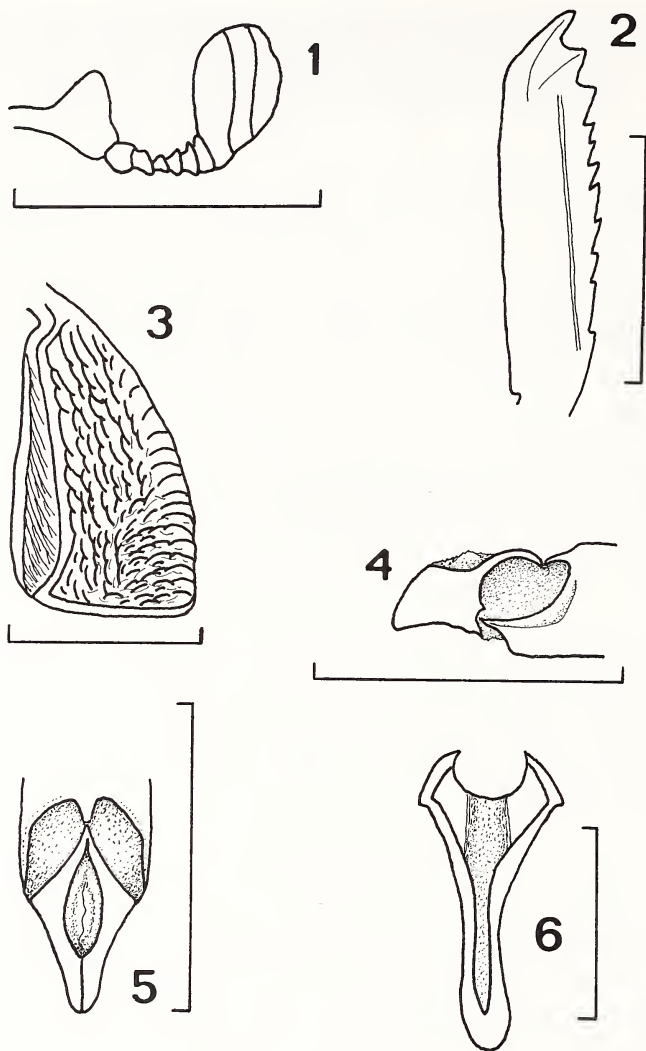
The genera *Nesopalla* Paulian and Howden and *Anopsiostes* Paulian are characterized by the eyes not seen from above, only in lateral view; the first genus is represented by two Antillean species and the second one is monotypical, restricted to Ecuador (Paulian, 1982; Paulian and Howden, 1982). In this paper we describe a second species of *Anopsiostes* recently collected at the tropical moist forest of the Mexican state of Veracruz.

***Anopsiostes pauliani*, new species**

Figs. 1-6

**Description.** *Holotype male.* Length (unrolled body) 5.5 mm; maximum width (at basal third of elytra) 1.6 mm. Dorsal color metallic green with opaline lustre; surface with simple punctures and very minute setae (scarcely visible at 50×). Clypeus triangular with apex pointed, surface with dense, medium punctures, except on the apical and lateral regions; genae continuous with sides of clypeus; frons convex with punctures smaller than those of clypeus. Eyes not visible from above. Antennae with 10 articles (Fig. 1). Mentum without transverse suture; labial palpi with last article longer than preceding one. Labrum with apex slightly concave and ventrally extended at middle.

*Pronotum* transverse, margins entirely beaded; pronotal anterior angles obtuse but rounded, lateral borders with anterior half bent downwards; pronotal surface evenly convex with dense, small punctures gradually becoming larger and denser to anterior angles; a small, smooth areas present on the basal, apical and lateral regions. Scutellum with scarce, fine punctures. Elytra strongly convex, bent downwards at apex, with a feeble humeral umbone; elytral surface with irregular rows of small, shallow, rounded or oval punctures, rows not reaching the base except by a few punctures of the sutural stria; marginal stria broad, furrowed, continuous with the sutural stria at



Figs. 1-6. *Anopsiostes pauliani*, sp. nov. 1. Antenna, ventral view. 2. Fore tibia, dorsal view. 3. Hind tibia, ventral view. 4. Parameres, lateral view. 5. Parameres, dorsal view. 6. Spiculum gastrale, frontal view, Scale = 1 mm.

apex; sutural stria deeply impressed at apical declivity; three striae adjacent to marginal one with elongate, partially fused punctures; intervals flattened, sparsely and finely punctated; outermost interval convex at basal third. Hind wings well developed.

Fore tibia with three apical teeth on external border (Fig. 2). Middle and hind tibiae flattened, triangular, with apex truncate and thin; outer spur of middle tibia very short; ventral face of hind tibia divided by a longitudinal ridge, internal face

with longitudinal striae adjacent to ridge, external face with longitudinal, arcuate streaks and transverse, short lines near the external and apical borders (Fig. 3). Hind tarsi articulate on dorsal face of tibia and slightly longer than tibial apex. Genitalia with parameres short, symmetrical (Figs. 4–5); spiculum gastrale with a long manubrium (Fig. 6).

**Variation.** Length of female paratype is 5.4 mm and maximum width is 1.6 mm; similar to holotype except; dorsal color darker, pronotal punctation slightly sparser, scutellum with larger punctures and outer spur of middle tibia longer.

**Etymology.** This species is respectfully dedicated to Dr. Renaud Paulian in recognition of his great contribution to knowledge of the Coleoptera Scarabaeoidea, author of the revisions of Ceratocanthinae from Africa and South America.

**Types.** Holotype, ♂, MEXICO, Veracruz, Córdoba, Cuauhtémoc, alt. 940 m, 16-18-vi-1996, selva, trampa de luz, R. Hernández y L. Delgado (Instituto de Ecología, A.C., Xalapa, Mexico). Paratype: MEXICO, Veracruz: 1 ♀, same data as holotype (Collection of L. Delgado, Mexico City).

**Discussion.** This species can be distinguished from *Anopsiostes punctatus* Paulian, only other known species of the genus, by the dorsal color metallic green, not shining black; the pronotal anterior margin completely beaded, not beaded only at sides; the elytral disc with sparse punctation, not densely punctated; the fore tibia with three apical teeth, not with two teeth; and the hind tarsi slightly longer than apex of tibia, not shorter than this.

The Antillean genus *Nesopalla* is the another American genus with the eyes not seen from above, however this genus can be separated from *Anopsiostes* by the dorsal pubescence distinctly visible, the dorsal punctation ocellate or densely shagreened, the genae rounded and prominent, the vertex with a tubercle, and the mentum with a transverse suture. At present, the two genera seem very isolated from the remaining American genera of Ceratocanthinae and both show possible relationships with some genera of the Old World (Paulian, 1982; Paulian and Howden, 1982).

**Distribution.** *Anopsiostes pauliani* is only known from one locality at the external slope of the mountainous system Sierra Madre Oriental, this locality presents a little disturbed tropical evergreen seasonal forest located at 940 m of altitude; these physical characteristics are partially similar to those where occurs the Ecuadorean *A. punctatus*, however in this region of Ecuador is presents a tropical rain forest with higher canopy, located at 250 m of altitude and with higher rainfall and moisture.

The discovery of *A. pauliani* suggests than other species of this genus may be found in the tropical moist forests present between Ecuador and Mexico.

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